

SOME MOULDS FROM PENNSYLVANIA

BY DAVID R. SUMSTINE

In the study of the moulds of North America, the following species have been observed in Pennsylvania. An enumeration of these species may interest mycologists.

Fischer * divides the Mucorinae (Mucorales) into four families, Mucoraceae, Mortierellaceae, Chaetocladiaceae, and Cephalidaceae. No species of the second family have yet been found in our state.

MUCORACEAE

Mucor mucedo Linnaeus

This species is widely distributed on horse manure and can readily be cultivated on a decoction of horse manure, on potato, and on bread. It is seldom found on fruits.

Mucor racemosus Fresenius

Found on boiled potatoes, on bread, and on horse manure. It can be cultivated on bread and on potato.

Mucor piriformis Fischer

The specimens referred to this species agree fairly well with the description of Fischer † except the size of the columella and of the spores. In my specimens the columella is pear-shaped 117–150 μ high and 50–117 μ wide at the broadest part. The spores are broadly elliptical, 13–16 μ long and 10–13 μ wide. The spores germinate in the mineral liquid used by Van Tieghem and Le Monnier. ‡ A number of attempts to germinate them in water proved a failure.

The plants grew on the dung of deer, were cultivated on bread, on boiled potato, and on cornmeal.

Phycomyces nitens (Ågardh) Kunze

Usually found on oily substances and may be cultivated on ground flaxseed and on cornmeal.

* Fischer, Krypt. Flor. v. Deutschland, etc., 175–177. 1872.

† Fischer, *loc. cit.*, 191.

‡ Van Tieghem et Le Monnier, Ann. Sc. Nat. V. Ser. T. 17 : 267. 1873.

Spinellus fusiger (Link) Van Tieghem

Found on various species of *Mycena*.

Spinellus macrocarpus (Corda) Karsten

This species is also found on species of *Mycena*. Attempts to cultivate this and the former species were unsuccessful.

Sporodinia grandis Link

This is a ubiquitous mould growing on decaying fungi. It has been found on various species of mushrooms.

Rhizopus nigricans Ehrenberg

This is the most common species of the moulds. It grows on all kinds of decaying vegetable matter. It can easily be cultivated and assumes very interesting forms. Occasionally several sporangia appear on one sporangiophore. Peculiar thickenings occur frequently in the sporangiophores. The spores germinate in water.

Thamnidium elegans Link

The habitat of this species is on the manure of the tiger and of the horse. It has been cultivated on orange, on bread, on carrot, in Pasteur's solution with gelatine.

The manure of the tiger was obtained from the Pittsburgh Zoo.

Circinella umbellata Van Tieghem et Le Monnier

Grows on the manure of the tiger and of the horse, usually in company with *Thamnidium elegans*. Cultivated on orange, on bread, and in Pasteur's solution with gelatine.

Chaetostylum fresenii Van Tieghem et Le Monnier

This species was found growing among other moulds on an old decaying *Polyporus*.

Pilobolus crystallinus (Wiggers) Tode

Rather abundant on horse manure.

CHAETOCADIACEAE

Chaetocladium brefeldii Van Tieghem et Le Monnier

Grows parasitically on other mucors on horse manure. It was also found on *Phycomyces nitens* growing on flaxseed meal.

CEPHALIDACEAE

Piptocephalis repens Van Tieghem

Very common among other moulds on horse and dog manure.
It is parasitic on other moulds.

PITTSBURGH, PENNSYLVANIA

SHORTER NOTES

✓ *A New Name.*—**Pentstemon Metcalfei** Wooton & Standley,
nom. nov.

P. puberulus Wooton & Standley, Bull. Torrey Club 36: 112
4 Mr 1909.

Not *P. puberulus* M. E. Jones, Contr. Western Bot. 12: 64.
1908.

Prof. A. A. Heller kindly called our attention to the fact that
the name *P. puberulus* was used last year by Mr. Jones. We
had Mr. Jones' paper at hand at the time of naming the plant
but had neglected to examine it for new species of *Pentstemon*.

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A "WEEPING" SPRUCE.—Some weeks ago Miss Helen Stewart
brought to Teachers College a specimen of a curious spruce tree
which was collected about one hundred miles north of Winnipeg.
The Indian guides call it the "Unknown Tree," and claim that it
is the only one in existence. The tree is described as about sixty
feet high, with the lower branches at least twenty feet from the
ground; the strikingly pendulous branches are six or more feet
long, slender, and themselves but little branched. About the
same time a specimen was taken to the New York Botanical
Garden; the rather indefinite description of the locality indicates
that the two specimens came from the same place, and possibly
from the same tree. Dr. Britton has pronounced it a "weeping"
spruce, probably *Picea canadensis*; the twigs are thicker than
usual (due perhaps to its peculiar habit of growth) but the
sterigmata indicate *P. canadensis*.

JEAN BROADHURST